

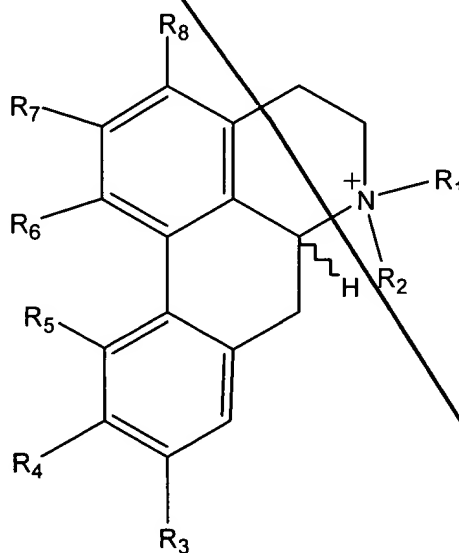
CLAIMS

What is claimed is:

1. A method of prophylaxis and treatment of varicose veins and hemorrhoids comprised of the administration to a patient in need thereof an effective amount of a composition containing an isoquinoline alkaloid or analog thereof.

2. The method of claim 1 wherein said isoquinoline alkaloid is selected from an aporphine alkaloid or a benzophenanthridine alkaloid.

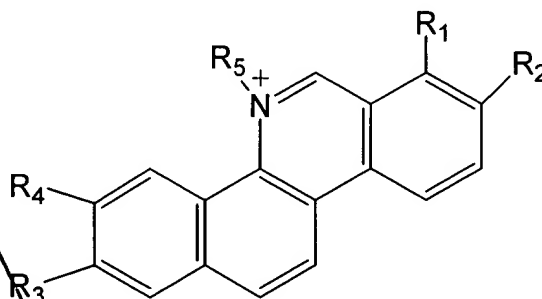
3. The method of claim 2 wherein said aporphine alkaloid is selected from the group of compounds having the following structure:



wherein R₁ and R₂ are independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, alkenyl or substituted alkenyl; R₃, R₄, R₅, R₆, R₇ and R₈ are independently selected from the group consisting of H, hydroxy, thiol, methoxy, methyl sulfide, methylenedioxy, alkoxy, alkyl sulfide; and the pharmaceutically acceptable acid addition salts, selected from the group consisting of chloride, iodide, fluoride, sulfate, phosphate, acetate or carbonate and a pharmaceutically acceptable carrier thereof.

4. The method of claim 2 wherein said aporphine alkaloid is selected from Magnoflorine or Laurifoline.

5. The method of claim 2 wherein said benzophenanthridine alkaloid is selected from the group of compounds having the following structure:



wherein R₁, R₂, R₃ and R₄ are independently selected from the group consisting of H, hydroxy, alkoxy, methoxy, methylenedioxy, thiol, methyl sulfide and alkyl sulfide; and R₅ is selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, alkenyl and substituted alkenyl; and the pharmaceutically acceptable acid addition salts selected from the group consisting of chloride, iodide, fluoride, sulfate, phosphate, acetate and carbonate and a pharmaceutically acceptable carrier thereof.

6. The method of claim 2 wherein said benzophenanthridine alkaloid is Chelerythrine.

7. The method of claim 1 wherein said isoquinoline alkaloid is obtained by organic synthesis.

8. The method of claim 1 wherein said isoquinoline is isolated from a plant.

9. The method of claim 1 wherein said plant is selected from the group consisting of the following genera: *Zanthoxylum*, *Tinospora*, *Mahonia*, *Phellodendron*, *Aristolochia*, *Magnolia*, *Thalictrum*, *Coptis*, *Epimedium*, *Ranunculus*, *Sinomenium*,

~~Nandina, Manodora, Berberis, Fumaria, Chelidonium, Pachygone, Dioscoreophyllum, Glaucium, Clematis, Aconitum or Coccus, Xanthoxylum, Toddalia, Papaver, Hypecoum, Hylomecon, Prantl, Argemone, Eschscholtzia, Sanguinaria, Corydalis, Dicentra, Fagara, Symphoricarpos, Bocconia, Xylocarpus, and Mocleaya.~~

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10. The method of claim 8 wherein the isoquinoline alkaloid is obtained from the stem and root bark or whole plant.

10 11. The method of claim 1 wherein the isoquinoline alkaloid is formulated as a component in an herb powder, a crude herb extract, as a mixture containing enriched isoquinoline alkaloids from the plant source, or as a substantially purified compound.

15 12. The method of claim 1 wherein the composition is pharmaceutically formulated for enteral administration, parenteral administration and topical application at a dose selected from 0.01 to 50 mg/kg of body weight.

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20 13. A method for the isolation and purification of a isoquinoline alkaloids from a plant comprising:

- (a) extraction of the ground biomass of a plant containing isoquinoline alkaloids with a solvent; and
(b) neutralization and concentration of the neutralized extract; and

25 14. The method of claim 13 further comprising:

- (c) purification of said extract by a chromatographic method.

15. The method of claim 13 wherein the plant is selected from the group consisting Araceae, Aristolochiaceae, Berberidaceae, Caprifoliaceae, Euphorbiaceae, Fumariaceae, Helleboraceae, Lauraceae, Magnoliaceae, Menispermaceae, Mrliaceae, Papaveraceae, Ranunculaceae, Rhamnaceae and Rutaceae.

16. The method of claim 13 wherein the plant is selected from the group consisting of: *Zanthoxylum*, *Tinospora*, *Mahonia*, *Phellodendron*, *Aristolochia*, *Magnolia*, *Thalictrum*, *Coptis*, *Epimedium*, *Ranunculus*, *Sinomenium*, *Nandina*, *Manodora*, *Berberis*, *Fumaria*, *Chelidonium*, *Pachygone*, *Dioscoreophyllum*, *Glaucium*, *Clematis*, *Aconitum* or *Cocculus*, *Xanthoxylum*, *Toddalia*, *Papaver*, *Hypecoum*, *Hylomecon*, *Pranlt*, *Argemone*, *Eschscholtzia*, *Sanguinaria*, *Corydalis*, *Dicentra*, *Fagara*, *Symphoricarpos*, *Bocconia*, *Xylocarpus*, and *Mocleaya*.

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17. The method in claim 13 wherein the biomass is extracted in a dynamic mode.

18. The method of claim 13 wherein said dynamic mode is a vat extractor.

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19. The method of claim 13 wherein the biomass is extracted in a static mode.

20. The method of claim 19 wherein said static mode is a column extractor.

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21. The method of claim 14 wherein said chromatographic method is selected from ion exchange chromatography, absorption chromatography, reverse phase chromatography, size exclusive chromatography, ultra-filtration or a combination of two or more of these methods.

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